

Key Learning of Unit: Changing Earth

The Earth is constantly in a state of interior and exterior change.

Unit Essential Question:

What factors cause changes to the Earth's crust?

Instructional Tools:

Textbook, videos, laser disc, posters, websites, study guide, models, demonstrations

Concept:

Plate Tectonics

Lesson EQ:

How is the structure of the earth organized?

Lesson EQ:

What causes convection currents in the Earth's mantle?

Lesson EQ:

What evidence supports the "Theory of Continental Drift"?

Lesson EQ:

How does ocean-floor spreading relate to continental drift?

Lesson EQ:

How is the Earth's crust affected by the mantle?

Lesson EQ:

How do tectonic plate movements explain the changes that occur in the Earth's crust?

Vocabulary:

core, mantle, Pangaea, mid-ocean ridge, trench, subduction, divergent / convergent / transform / boundaries, convection currents, ocean-floor-spreading,

Concept:

Earthquakes

Lesson EQ:

How do the different types of stresses and faults affect the Earth's crust?

Lesson EQ:

How does the energy of an earthquake travel through the Earth?

Lesson EQ:

How do seismologists measure and locate earthquakes?

Lesson EQ:

How do seismologists monitor earthquakes?

Lesson EQ:

How do earthquakes affect the Earth and how do we prepare for them?

Vocabulary:

seismic waves, focus, epicenter, tsunami, P waves, S waves, surface waves, seismologist, seismograph, Richter scale, compression, tension, shearing, fracture, fault, hanging & foot walls, normal / strike-slip / reverse / thrust-faults, fold, anticline, syncline, stress

Concept:

Volcanoes

Lesson EQ:

What are the major Earthquake and volcano zones?

Lesson EQ:

What are the parts of volcanoes and how do they relate to each other?

Lesson EQ:

What are the names and characteristics of the three main types of volcanoes?

Vocabulary:

Vent, cinder cone, composite, shield, crater, pipe, magma chamber, caldera, dormant, extinct, active, magma, hot spot, island arc, pyroclastic flow